

Remarks

In paragraphs 2 and 3 of the Action, claims 9 and 14-16 are rejected under 35 USC 112, second paragraph. Regarding claim 9, Examiner asks what is meant by the words "the light is structured by a first, 360 light structuring aperture". This language can be found at page 8, lines 8-11 which states that "the light rays that pass parallel to the angle of aperture 26 are the "structured light rays" referred to herein". Thus, the term "structured light" means light which has been defined into a particular shape, in this case an annular ring of radially inwardly directed light rays. This shape is defined by the annular aperture (which in turn is defined by the facing surfaces of the aperture blocks) which the light source is directed through.

Regarding claim 14, Examiner asks what is meant by the words "a second, 360 degree light structuring aperture". The second light structuring aperture is reference numeral 28 in Figure 2, and numeral 61 in the embodiment of Figure 5. The description of this can be found at page 5, last paragraph continuing to page 6, and also page 10 , lines 6-end (regarding Fig.2) and at page 12, line 7 through page 13, line 8 (regarding Fig. 5).

Regarding claim 15, Examiner asks what is meant by the words "the second, 360 degree light structuring aperture is formed by spaced"? Firstly, the antecedent basis for this claim was wrong and has been corrected. Secondly, to give meaning to this phrase, one must continue reading the claim past the word "spaced" which reads: "the second, 360 degree light structuring aperture is formed by *spaced, facing surfaces of said second aperture block and said third aperture block, respectively.*" The description of the second aperture block is found at page 5, last 3 lines:

"The upper (first) and middle (second) aperture blocks 20 and 22 are spaced from each other to define an upper light structuring aperture 26, and the middle (second) and lower (third) aperture blocks are spaced from each other to define a lower light structuring aperture 28,..."

And also at page 10, lines 17-20:

"The facing surfaces 22b and 24a of the middle (second) and lower (third) aperture blocks are beveled to angle upwardly to direct light toward the convex surface of the lens 16b which illuminates the area of the lens inside O-ring 19, thereby giving an image of this area of the lens inside O-ring 19, thereby giving an image of this area of the lens to imaging device 14."

Regarding claim 16, Examiner asks what is meant by the words "configured to structure light from said light source". This claim has been amended to better define the annular light structuring aperture as "configured to structure light from said light source into 360° light rays which are directed radially inwardly to said open center." See above Remarks for where in the specification description of the upper and lower light structuring apertures and how they allow only parallel light rays therethrough, which is the structured light rays referred to herein, can be found.

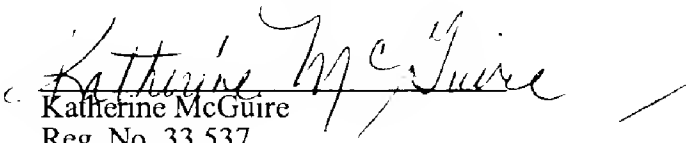
In paragraphs 4 and 5 of the Action, claim 16 has been rejected under 35 USC 102(b) as being anticipated by Ebel et al (US Pat. No. 5,812,254). By the instant amendment and remarks made above, it should now be clear that Ebel et al does not anticipate the present invention as defined by the claims, including claim 16. Ebel et al does not direct light radially inward, but

rather directs light in a linear path, through the lens from the convex side to the concave side thereof from a location beneath the lens. As such, the light is not directed at the edge of the lens, but rather impinges the entire lens surface. This is but one of the many notable and important distinctions between the device of Ebel et al and the present invention which operate upon completely different principles. Removal of this rejection to claim 16 is therefore requested.

In paragraphs 6 and 7 of the Action, claims 1-15 and 17-27 are rejected under 35 USC 103(a) as being unpatentable over Ebel et al in view of Sprague. The remarks made above with regard to the section 102(b) rejection of claim 16 over Ebel et al should be considered as being repeated here. The deficiencies of Ebel et al are not cured by Sprague for the following reasons: Neither Ebel et al or Sprague disclose or suggest providing light which is both structured (shaped) and diffuse, as claimed. This is an important distinction in that the structured, diffuse light of the present invention allows the entire inside of the lens to be imaged in the manner of a fiber optic. Sprague actually teaches away from using diffuse light by providing focusing lenses 61a, 61b (Fig. 4) such that the light directed at the lens is focused rather than diffuse (see Col. 7, lines 42-47 thereof). This causes the lens to be imaged in a very different manner than the instant invention. For example, Sprague et al will not image the rear surface of the lens surface (see Col. 8, lines 35-45 thereof) whereas the instant invention has this capability. Thus, since neither reference disclose or suggest all the elements of the instant invention as claimed, they cannot in combination render the instant invention unpatentable. Further distinguishing features of the present invention not disclosed or suggested in Ebel et al or Sprague include the aperture blocks which define the structured light (claim 10), as well as the beveled angle of the aperture (claim 11), as well as the adjustability of the aperture spacing to allow for a variety of

lens sizes to be images with the instant invention (claim 26), as well as providing both an upper and a lower aperture to image different portions of the lens under inspection (claim 14). Removal of this rejection to the claims is therefore requested.

Respectfully submitted,


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